

WRENCHES

WRENCHES

BILLINGS & SPENCER BICYCLE

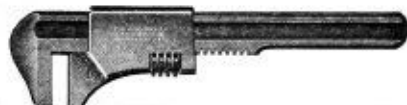


Nickel Plated

Drop Forged Steel, Hard-
ened Jaws, Telescoping
Handle.

No. 97—4 $\frac{1}{4}$ in. Long. Opens 1 $\frac{1}{16}$ in. Jaws $\frac{1}{4}$ in. Each
Thick, Weight Each 6 Oz. \$1.00
One in a Box.

BILLINGS & SPENCER AUTO



Duro Black Rust Proof Finish

Drop Forged Steel, Specially Heat Treated.

Nos.	1	2	3	4	5	6
Length, Inches	6 $\frac{1}{2}$	8	10 $\frac{3}{4}$	12 $\frac{1}{4}$	14 $\frac{3}{4}$	18 $\frac{1}{4}$
Open, Inches	1 $\frac{1}{16}$	1 $\frac{1}{8}$	2 $\frac{1}{16}$	2 $\frac{3}{4}$	3	3 $\frac{1}{16}$
Thickness Jaw, Inches	$\frac{1}{16}$	$\frac{3}{16}$	$\frac{7}{16}$	$\frac{1}{2}$	$\frac{3}{8}$	$\frac{3}{4}$
Depth Jaw, Inches	1	1 $\frac{1}{4}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{3}{4}$	2 $\frac{1}{4}$
Weight Each, Lbs.	$\frac{1}{16}$	1 $\frac{1}{32}$	1 $\frac{3}{4}$	2	3 $\frac{3}{4}$	6 $\frac{1}{2}$
Each	\$1.15	1.50	1.90	2.40	3.00	4.00

One in a Box.

PIPE WRENCHES

CHAIN PIPE WRENCHES

BILLINGS & SPENCER



Reversible, Double Action

The pipe may be turned in either direction instantly without removing the wrench or loosening the chain.

It can be instantly converted to a fitting wrench by simply removing outer jaws.

The Jaws are double ended and reversible, doubling the life of the wrench.

Handle and Jaws Drop Forged from Special Open Hearth Steel, and Heat Treated. Handles have natural Oil Finish, Jaws have "Duro" Black Rust-proof Finish with Red-painted Panels.

Nos.	14	20	27
Trade Nos.	30	31	32
Takes Pipe, Inches.	$\frac{1}{8}$ to $\frac{3}{4}$	$\frac{1}{8}$ to $1\frac{1}{2}$	$\frac{1}{4}$ to $2\frac{1}{2}$
Length, Inches.	14	20	27
Length Chain, Inches. ..	8	$12\frac{1}{2}$	$16\frac{1}{2}$
Breaking Strain, Lbs. ...	3600	6700	9800
Weight Each, Lbs.	3	6	$10\frac{1}{2}$
Each	\$5.00	7.00	10.00
Nos.	37	47	57
Trade Nos.	33	$33\frac{1}{2}$	34
Takes Pipe, Inches.	$\frac{3}{4}$ to 4	1 to 6	$1\frac{1}{2}$ to 8
Length, Inches.	37	47	57
Length Chain, Inches. ..	$20\frac{3}{4}$	$30\frac{1}{4}$	41
Breaking Strain, Lbs. ...	12500	14300	15700
Weight Each, Lbs.	19	28	42
Each	\$14.00	18.00	22.00

Note—Above list is for wrenches with flat chain, they can also be furnished with cable chain when so ordered.

WRENCHES

BILLINGS & SPENCER SPANNER



Model L, Adjustable

Drop Forged Steel, Dull Black Finish.

To adjust it is only necessary to press on the top of the movable jaw and slide it into its new position.

The bar is drop forged and the moving jaw is made of alloy steel, hardened all over under scientific heat controls.

A most necessary set for all machine shops and manufacturing plants.

Nos.	0	1	2	3
Length, Inches	7	9	9	10 1/4
Takes Circle, Inches	3/4 to 2	2 to 4	2 to 4	2 to 4 3/4
Diameter Pin, Inches	3/8	1/2	5/8	3/4 - 7/8
Length Pin, Inches	1 1/2	1 1/2	1 1/2	1 1/2
Weight Each, Oz.	4	8	10	21
Each	\$0.70	.75	.85	1.25

One in a Box.

BIT BRACE SOCKET WRENCHES

BILLINGS & SPENCER



For Hexagon Nuts and Cap Screws

Drop Forged Steel, Dull Black Finish, with Standard Brace Shank.

Nos.	921A	922A	922B	922C	923A	924A	924B
U. S. S. Nut	1/8	1/8	1/8	1/8	1/4	3/8	1/2
H. H. Cap Screw	1/8	1/8	1/8	1/4	1/2	3/4	1
S. A. E. Nuts or Screws	1/8	1/8	1/8	1/4	1/2	3/4	1
Openings, Inches	3/8	3/8	3/8	3/8	3/8	3/8	3/8
Length, Inches	4	4 1/2	4 1/2	4 1/2	4 3/4	5 1/4	5 1/2
Diam. Head, In.	1 1/8	1 1/8	1 1/8	1 1/8	1 3/8	1 3/4	1 7/8
Wt. Each, Oz.	1 1/2	2 1/2	2 1/2	2 1/2	3	4	4
Each	\$0.80	.88	.98	.98	1.04	1.16	1.16

Nos.	925A	925B	925C	926A	926B	926C
U. S. S. Nut	1/2	1/2	1/2	1/2	1/2	1/2
H. H. Cap Screw	1/2	1/2	1/2	1/2	1/2	1/2
S. A. E. Nuts or Screws	1/2	1/2	1/2	1/2	1/2	1/2
Opening, Inches	1 1/8	1 1/8	1 1/8	1 1/8	1 1/8	1 1/8
Length, Inches	5	6	6	7	7 1/2	7 1/2
Diameter Head, Inches	1 1/8	1 1/8	1 1/8	1 1/8	1 3/4	1 3/4
Weight Each, Oz.	5	6	6	7	7 1/2	7 1/2
Each	\$1.26	1.42	1.42	1.54	1.54	1.74

ENGINEERS WRENCHES

BILLINGS & SPENCER



15 Degree Angle, Double Head.

Drop Forged Steel, Dull Black Finish, Polished Heads, Hardened.

The heads of the Wrenches are plainly marked showing the purpose for which they are intended.

Nos.	Trade Nos.	U. S. Standard Bolt Size	Hexagon Head Cap Screw Size	S. A. E. Standard Screw and Nut	Milled Opening, Inches	Length, Inches	Thick-ness of Head, Inches	Weight		Each
								Lbs.	Ounces	
1100A	.....	$\frac{1}{8}$	$\frac{1}{8}$	.....	$\frac{1}{4} - \frac{5}{16}$	$3 \frac{1}{2}$	$\frac{3}{32}$	.....	1	\$0.32
1100	721	$\frac{1}{8}$	$\frac{1}{8} - \frac{7}{16}$	.....	$\frac{1}{4} - \frac{5}{16}$	4	$\frac{1}{16}$	.....	$1 \frac{1}{4}$	.34
1101	21	$\frac{1}{8} - \frac{7}{16}$	$\frac{1}{8}$	.....	$\frac{1}{4} - \frac{5}{16}$	4	$\frac{1}{16}$	.....	$1 \frac{1}{4}$	.34
1102	722	$\frac{1}{8}$	$\frac{1}{8} - \frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4} - \frac{5}{16}$	$4 \frac{1}{2}$	$\frac{3}{32}$	.....	2	.42
1103	22	$\frac{1}{8} - \frac{1}{4}$	$\frac{1}{8} - \frac{7}{16}$	$\frac{1}{4}$	$\frac{1}{4} - \frac{5}{16}$	$4 \frac{1}{2}$	$\frac{3}{32}$	.....	2	.42
1104	723	.....	$\frac{7}{16} - \frac{1}{4}$	$\frac{1}{4}$	$\frac{3}{8} - \frac{7}{16}$	$4 \frac{1}{2}$	$\frac{3}{32}$	.....	2	.42
1105	723a	$\frac{1}{4}$	$\frac{7}{16} - \frac{7}{16}$	$\frac{3}{8}$	$\frac{3}{8} - \frac{1}{2}$	$4 \frac{1}{2}$	$\frac{3}{32}$	.....	2	.42
1107	23	$\frac{7}{16} - \frac{1}{4}$	$\frac{7}{16}$	$\frac{7}{16}$	$\frac{1}{2} - \frac{1}{2}$	$4 \frac{1}{2}$	$\frac{3}{32}$	.....	2	.42
1106	724	.....	$\frac{7}{16} - \frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8} - \frac{7}{16}$	5	$\frac{7}{16}$	.....	3	.50
1108	24	$\frac{7}{16} - \frac{7}{16}$	.....	.....	$\frac{1}{2} - \frac{1}{2}$	5	$\frac{7}{16}$	.....	3	.50
1109	725	$\frac{1}{4}$	$\frac{1}{4} - \frac{7}{16}$	$\frac{1}{4} - \frac{3}{8}$	$\frac{1}{2} - \frac{1}{2}$	5	$\frac{7}{16}$	.....	3	.50
1110	725a	.....	$\frac{1}{4} - \frac{3}{8}$	$\frac{1}{4} - \frac{3}{8}$	$\frac{1}{2} - \frac{7}{16}$	5	$\frac{7}{16}$	.....	3	.50
1111	725b	$\frac{1}{4}$	$\frac{7}{16} - \frac{3}{8}$	$\frac{7}{16} - \frac{3}{8}$	$\frac{1}{2} - \frac{7}{16}$	$5 \frac{1}{2}$	$\frac{7}{16}$	.....	$3 \frac{1}{2}$	.50
1112	25	$\frac{1}{4} - \frac{7}{16}$	$\frac{7}{16}$	$\frac{7}{16}$	$\frac{1}{2} - \frac{1}{2}$	$5 \frac{1}{2}$	$\frac{7}{16}$	.....	$3 \frac{1}{2}$	.50
1113	726	$\frac{1}{4}$	$\frac{7}{16} - \frac{7}{16}$	$\frac{7}{16} - \frac{7}{16}$	$\frac{1}{2} - \frac{3}{8}$	6	$\frac{1}{2}$	.....	5	.62
1114	26	$\frac{1}{4} - \frac{3}{8}$	$\frac{7}{16}$	$\frac{7}{16}$	$\frac{1}{2} - \frac{1}{2}$	6	$\frac{1}{2}$	.....	5	.62
1116	727	.....	$\frac{3}{8} - \frac{7}{16}$	$\frac{3}{8} - \frac{7}{16}$	$\frac{7}{16} - \frac{5}{8}$	6	$\frac{1}{2}$	.....	5	.62
1118X	27c	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{7}{16} - \frac{1}{2}$	$6 \frac{1}{2}$	$\frac{3}{8}$	.....	6	.62
1118	27	$\frac{7}{16} - \frac{3}{8}$	.....	.....	$\frac{1}{2} - \frac{1}{2}$	$6 \frac{1}{2}$	$\frac{3}{8}$	.....	6	.62
1117	728	.....	$\frac{3}{8} - \frac{1}{2}$	$\frac{3}{8} - \frac{1}{2}$	$\frac{7}{16} - \frac{3}{4}$	7	$\frac{1}{2}$	.....	8	.74
1119	28	$\frac{7}{16} - \frac{7}{16}$	.....	.....	$\frac{1}{2} - \frac{1}{2}$	7	$\frac{1}{2}$	.....	8	.74
1119X	.....	$\frac{3}{8}$	$\frac{7}{16}$	$\frac{7}{16}$	$\frac{3}{8} - \frac{1}{2}$	7	$\frac{1}{2}$	.....	8	.74
1120	729	.....	$\frac{7}{16} - \frac{1}{2}$	$\frac{7}{16} - \frac{1}{2}$	$\frac{3}{8} - \frac{3}{4}$	7	$\frac{1}{2}$	.....	8	.74
1120X	28s	$\frac{7}{16}$	$\frac{7}{16}$	$\frac{7}{16}$	$\frac{3}{8} - \frac{1}{2}$	7	$\frac{1}{2}$	.....	8	.74
1123X	29	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2} - \frac{3}{4}$	7	$\frac{1}{2}$	.....	8	.74
1123	29	$\frac{3}{8} - \frac{7}{16}$	.....	.....	$\frac{1}{2} - \frac{3}{4}$	7	$\frac{1}{2}$	.....	8	.74
1121	730	.....	$\frac{7}{16} - \frac{7}{16}$	$\frac{7}{16}$	$\frac{5}{8} - \frac{1}{2}$	8	$\frac{7}{16}$	.....	10	.90
1122	730a	$\frac{1}{2}$	$\frac{7}{16} - \frac{5}{8}$	$\frac{7}{16} - \frac{7}{16}$	$\frac{5}{8} - \frac{7}{8}$	8	$\frac{7}{16}$	.....	10	.90
1124	30	$\frac{3}{8} - \frac{1}{2}$	$\frac{7}{16}$	$\frac{7}{16}$	$\frac{1}{2} - \frac{3}{4}$	8	$\frac{7}{16}$	.....	10	.90
1125	731	.....	$\frac{1}{2} - \frac{7}{16}$	$\frac{1}{2}$	$\frac{3}{4} - \frac{1}{2}$	9	$\frac{1}{2}$	.....	13	.90
1126	731a	$\frac{1}{2}$	$\frac{1}{2} - \frac{5}{8}$	$\frac{1}{2} - \frac{7}{16}$	$\frac{3}{4} - \frac{7}{8}$	9	$\frac{1}{2}$	.....	13	.90
1128	31	$\frac{7}{16} - \frac{1}{2}$	$\frac{5}{8}$	$\frac{7}{16}$	$\frac{3}{8} - \frac{7}{8}$	9	$\frac{1}{2}$	.....	13	.90
1130	731b	$\frac{1}{2}$	$\frac{7}{16} - \frac{5}{8}$	$\frac{7}{16}$	$\frac{1}{2} - \frac{7}{8}$	9	$\frac{1}{2}$	.....	13	.90
1129	32	$\frac{7}{16} - \frac{7}{16}$	.....	.....	$\frac{3}{8} - \frac{1}{2}$	10	$\frac{1}{2}$	.....	1	1.10
1131	732	.....	$\frac{7}{16} - \frac{3}{4}$	$\frac{1}{2}$	$\frac{1}{2} - 1$	10	$\frac{1}{2}$	.....	1	1.10
1131X	33a	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{7}{16} - \frac{5}{8}$	$\frac{7}{8} - \frac{1}{2}$	10	$\frac{1}{2}$	.....	1	1.10
1132	33	$\frac{1}{2} - \frac{7}{16}$	$\frac{5}{8}$	$\frac{7}{16}$	$\frac{7}{8} - \frac{1}{2}$	10	$\frac{1}{2}$	.....	1	1.10
1132X	33c	.....	$\frac{3}{4}$	$\frac{5}{8} - \frac{1}{2}$	$\frac{1}{2} - 1$	10	$\frac{1}{2}$	.....	1	1.10
1133	733	$\frac{1}{2}$	$\frac{5}{8} - \frac{3}{4}$	$\frac{7}{16} - \frac{1}{2}$	$\frac{7}{8} - 1$	10	$\frac{1}{2}$	.....	1	1.10
1134	34	$\frac{1}{2} - \frac{5}{8}$	$\frac{5}{8}$	$\frac{7}{16} - \frac{3}{4}$	$\frac{7}{8} - 1 \frac{1}{8}$	11	$\frac{1}{2}$	.....	7	1.36
1135	734	$\frac{1}{2}$	$\frac{5}{8} - \frac{7}{8}$	$\frac{7}{16}$	$\frac{7}{8} - 1 \frac{1}{8}$	11	$\frac{1}{2}$	.....	7	1.36
1136X	34a	$\frac{5}{8}$	.....	$\frac{5}{8} - \frac{3}{4}$	$\frac{1}{2} - 1 \frac{1}{8}$	11	$\frac{1}{2}$	.....	7	1.36
1136	35	$\frac{7}{16} - \frac{5}{8}$	.....	$\frac{3}{4}$	$\frac{1}{2} - 1 \frac{1}{8}$	11	$\frac{1}{2}$	.....	7	1.36
1138	735	.....	$\frac{3}{4} - \frac{7}{8}$	$\frac{1}{2}$	$1 - 1 \frac{1}{8}$	11	$\frac{1}{2}$	.....	7	1.36
1137	36	$\frac{7}{16} - \frac{3}{4}$	1	$\frac{7}{8}$	$\frac{3}{4} - 1 \frac{1}{4}$	12	$\frac{1}{2}$	.....	14	1.92
1139	736	$\frac{3}{4}$	$\frac{3}{4} - 1$	$\frac{1}{2} - \frac{7}{8}$	$1 - 1 \frac{1}{4}$	12	$\frac{1}{2}$	.....	14	1.92
1140	37	$\frac{5}{8} - \frac{3}{4}$	1	$\frac{3}{4} - \frac{7}{8}$	$1 \frac{1}{8} - 1 \frac{1}{4}$	12	$\frac{1}{2}$	.....	14	1.92
1140X	737	$\frac{3}{4}$	$\frac{7}{8} - 1$	$\frac{3}{4}$	$1 \frac{1}{8} - 1 \frac{1}{4}$	12	$\frac{1}{2}$	.....	14	1.92
1141	38	$\frac{5}{8} - \frac{7}{8}$	.....	$\frac{3}{4} - 1$	$1 \frac{1}{8} - 1 \frac{1}{4}$	14	$\frac{3}{4}$	.....	2	2.80
1145	739	$\frac{3}{4}$	$1 - 1 \frac{1}{8}$	$\frac{7}{8}$	$1 \frac{1}{4} - 1 \frac{3}{8}$	14	$\frac{3}{4}$	.....	2	2.80
1146	39	$\frac{3}{4} - \frac{7}{8}$	1	$\frac{7}{8} - 1$	$1 \frac{1}{4} - 1 \frac{3}{8}$	14	$\frac{3}{4}$	.....	2	2.80
1148	40	$\frac{3}{4} - 1$	1	$\frac{3}{4} - 1 \frac{1}{8}$	$1 \frac{1}{4} - 1 \frac{3}{8}$	16	$\frac{1}{2}$	.....	3	3.80
1150	41	$\frac{7}{8} - 1$	.....	$1 - 1 \frac{1}{8}$	$1 \frac{1}{2} - 1 \frac{3}{8}$	16	$\frac{1}{2}$	.....	3	3.80
1151	42	$\frac{7}{8} - 1 \frac{1}{8}$	.....	$1 - 1 \frac{1}{4}$	$1 \frac{1}{2} - 1 \frac{3}{8}$	18	$\frac{1}{2}$	.....	6	5.30
1153	43	$1 - 1 \frac{1}{8}$	.....	$1 \frac{1}{8} - 1 \frac{1}{4}$	$1 \frac{1}{2} - 1 \frac{3}{8}$	18	$\frac{1}{2}$	.....	6	5.30
1154	44	$1 - 1 \frac{1}{4}$	.....	$1 \frac{1}{8} - 1 \frac{3}{8}$	$1 \frac{1}{2} - 2$	21	$1 \frac{1}{8}$	.....	10	7.20
1155	45	$1 \frac{1}{8} - 1 \frac{1}{4}$	.....	$1 \frac{1}{4} - 1 \frac{3}{8}$	$1 \frac{1}{2} - 2$	21	$1 \frac{1}{8}$	.....	2	7.20
1156	46	$1 \frac{1}{8} - 1 \frac{3}{8}$	.....	$1 \frac{1}{4} - 1 \frac{1}{2}$	$1 \frac{1}{2} - 2 \frac{1}{8}$	23	$1 \frac{1}{8}$	.....	11	10.50
1157	47	$1 \frac{1}{4} - 1 \frac{3}{8}$	.....	$1 \frac{3}{8} - 1 \frac{1}{2}$	$2 - 2 \frac{1}{8}$	23	$1 \frac{1}{8}$	.....	13	10.50
1158	48	$1 \frac{1}{4} - 1 \frac{1}{2}$	.....	$1 \frac{3}{8}$	$2 - 2 \frac{3}{8}$	24	$1 \frac{1}{8}$	.....	13	14.00

ENGINEERS WRENCHES

BILLINGS & SPENCER



15 Degree Angle, Single Head

Drop Forged Steel, Dull Black Finish, Polished Heads, Hardened.

The heads of the wrenches are plainly marked showing the purpose for which they are intended.

Nos.	Trade Nos.	U. S. S. Bolt Size	Hex. Head Cap Screw Size	Milled Openings	Length, Inches	Thick-ness of Head, Inches	Wt., Oz.	Each
1000A				1/4	3	1 1/2	1	\$0.28
1000	00	5/8	1/2	3/8	3	1 1/2	1	.28
1000B				3/8	3 1/2	1 1/2	1	.28
1001	0	3/4	5/8	1/2	4	1 1/2	1 1/2	.30
1002	701	1	3/4	5/8	4	1 1/2	1 1/2	.30
1003	1	1 1/4	1	3/4	5	1 1/2	3	.36
1004	702		3/4	3/4	5	1 1/2	3	.36
1005	2	1 1/2	1 1/4	1	5 1/2	1 1/2	4	.44
1006	703		1 1/4	1	5 1/2	1 1/2	4	.44
1007	3	1 3/4	1 1/2	1 1/4	6 1/2	1 1/2	6 1/2	.52
1008	704		1 1/2	1 1/4	6 1/2	1 1/2	6 1/2	.52
1009	4	2	1 3/4	1 1/2	7 1/2	1 1/2	7	.64
1010	705		1 3/4	1 1/2	7 1/2	1 1/2	7	.64
1011	5	2 1/2	2	1 3/4	8 1/2	1 1/2	8 1/2	.76
1012	6	3	2 1/4	2	10 1/2	1 1/2	10 1/2	.92
1013	706		2 1/4	2	8 1/2	1 1/2	10 1/2	.92
1014	7	3 1/2	2 3/4	2 1/4	11 1/4	1 1/2	13 1/2	1.14
1015	707		2 3/4	2 1/4	11	1 1/2	13 1/2	1.50
1016	8	4	3 1/4	2 3/4	11 1/4	1 1/2	13 1/2	1.50
1017	708A		3 1/4	2 3/4	13	1 1/2	13 1/2	2.30
1018	9	4 1/2	4	3 1/2	13	1 1/2	13 1/2	2.30

HEAVY CAP SCREW WRENCHES

BILLINGS & SPENCER



15 Degree, Double Head, for Hexagon Head Cap Screws

Drop Forged Steel, Dull Black Finish, Polished Heads, Hardened.

The heads of the wrenches are plainly marked showing the purpose for which they are intended.

Nos.	Hex. Head Cap Screw Size	Milled Openings	Length, Inches	Thick-ness of Heads, Inches	Weight		Each
					Lbs.	Oz.	
1253	1/4 - 3/8	1/8 - 1/8	5 1/2	1/8	4		\$0.60
1254	1/2 - 3/8	1/8 - 1/8	5 1/2	1/8	4		.60
1255	1/2 - 1/2	1/2 - 5/8	6 1/4	3/8	6		.74
1256	3/8 - 1/2	1/8 - 5/8	6 1/4	3/8	6		.74
1257	3/8 - 1/2	1/8 - 3/4	7	1/8	9		.90
1258	1/2 - 1/2	1/2 - 3/4	7	1/8	9		.90
1259	1/2 - 1/2	5/8 - 1 1/8	7 3/4	1/2	12		1.10
1260	1/2 - 1/2	3/4 - 1 1/8	7 3/4	1/2	12		1.10
1261	1/2 - 3/4	3/4 - 7/8	8 3/4	1/8	1	1	1.36
1263	1/2 - 3/4	1 1/8 - 7/8	8 3/4	1/8	1	1	1.36
1264	1/2 - 3/4	1 1/8 - 1	10 1/4	5/8	1	8	1.80
1265	3/4 - 3/4	7/8 - 1	10 1/4	5/8	1	8	1.80
1266	3/4 - 3/4	7/8 - 1 1/8	11 3/4	3/4	1	15	2.50
1268	3/4 - 3/4	1 - 1 1/8	11 3/4	3/4	1	15	2.50
1269	3/4 - 1	1 - 1 1/4	13 1/4	7/8	2	8	3.30
1270	7/8 - 1	1 1/8 - 1 1/4	13 1/4	7/8	2	8	3.30

THIN HEAD CHECK NUT WRENCHES

BILLINGS & SPENCER



15 Degree Angle, Double Head

Drop Forged Steel, Dull Black Finish, Polished Heads, Hardened.

Nos.	Trade Nos.	U. S. Standard Bolt Size	Hex. Head Cap Screw Diam. Sc.	S. A. E. Standard Nut and Cap Screws Size Bolt	Milled Openings	Length, Inches	Thickness of Heads, Inches	Weight Each, Oz.	Each
1325			3/8 - 1/4	1/4	3/8 - 1/8	4 1/2	1/8	1	\$0.50
1326	623D		1/4 - 1/8	1/4 - 1/8	1/8 - 1/2	4 1/2	1/8	1	.50
1327			3/8 - 1/8	3/8 - 3/8	1/2 - 1/8	4 1/2	1/8	1	.50
1328	626S		3/8 - 1/8	3/8 - 1/8	3/8 - 3/8	5 1/2	1/8	3	.64
1329	628D		1/2 - 1/2	1/2 - 1/2	5/8 - 3/4	5 1/2	1/8	3	.64
1330	630E		1 1/4 - 5/8	1 1/4 - 5/8	3/4 - 7/8	7	1/8	4	.80
1350	623	1/2 - 1/4	1/2 - 1/8	1/2 - 1/8	1 1/2 - 1/2	4 1/2	1/8	1	.50
1350X	623E	1/2 - 1/8	1/2 - 1/8	1/2 - 1/8	3/8 - 1/2	4 1/2	1/8	1	.50
1351	624	1/2 - 1/8	1/2 - 1/8	1/2 - 1/8	1 1/2 - 1/2	4 1/2	1/8	1	.50
1351X	623D	1/4 - 1/8	1/4 - 1/8	1/4 - 1/8	1/2 - 1/2	4 1/2	1/8	1	.50
1352	625	1/4 - 1/8	1/4 - 1/8	1/4 - 1/8	1/2 - 1/2	4 1/2	1/8	1	.50
1353	626	1/4 - 3/8	1/4 - 3/8	1/4 - 3/8	1/2 - 1 1/8	5 1/2	1/8	3	.64
1353X	626X	3/8	3/8	3/8	1/2 - 1 1/8	5 1/2	1/8	3	.64
1354	627	1/2 - 3/8	1/2 - 3/8	1/2 - 3/8	1 1/2 - 1 1/8	5 1/2	1/8	3	.64
1355	628	1/2 - 1/8	1/2 - 1/8	1/2 - 1/8	1 1/2 - 1 1/8	5 1/2	1/8	3	.64
1356	629	3/8 - 1/8	3/8 - 1/8	3/8 - 1/8	1 1/2 - 1 1/8	7	1/8	4	.80
1356X	630E	1/2 - 1/8	1/2 - 5/8	1/2 - 1/8	3/4 - 7/8	7	1/8	4	.80
1357	630	3/8 - 1/2	3/8 - 1/2	3/8 - 1/2	1 1/2 - 7/8	7	1/8	4	.80
1357X	629D	1/2 - 1/2	1/2 - 1/2	1/2 - 1/2	3/8 - 3/4	7	1/8	4	.80
1358	631	1/2 - 1/2	1/2 - 1/2	1/2 - 1/2	3/8 - 7/8	7	1/8	4	.80
1359	632	1/2 - 1/2	1/2 - 1/2	1/2 - 1/2	3/8 - 1 1/8	8 1/2	1/4	7	1.12
1359X	632X	3/8 - 1 1/8	3/8 - 1 1/8	3/8 - 1 1/8	1 1/2 - 1	8 1/2	1/4	7	1.12
1360	633	1/2 - 1/8	1/2 - 5/8	1/2 - 5/8	3/8 - 1 1/8	8 1/2	1/4	7	1.12
1361	634	1/2 - 5/8	1/2 - 5/8	1/2 - 5/8	3/8 - 1 1/8	8 1/2	1/4	7	1.12
1362	635	3/8 - 5/8	3/8 - 5/8	3/8 - 5/8	1 1/2 - 1 1/8	10 1/2	1/4	15	1.68
1362X	635G	3/8 - 7/8	3/8 - 7/8	3/8 - 7/8	1 1/2 - 1 1/4	10 1/2	1/4	15	1.68
1363	636	1/2 - 3/4	1/2 - 3/4	1/2 - 3/4	1 1/2 - 1 1/4	10 1/2	1/4	15	1.68
1363X	635E	3/4 - 1	3/4 - 1	3/4 - 1	1 - 1 1/4	10 1/2	1/4	15	1.68
1364	637	5/8 - 3/4	5/8 - 3/4	5/8 - 3/4	1 1/2 - 1 1/4	10 1/2	1/4	15	1.68

LIGHT SERVICE WRENCHES

BILLINGS & SPENCER



22 1/2 Degree Angle, Double Head

Drop Forged Steel, Dull Black Finish, Polished Heads, Hardened. The heads of the wrenches are plainly marked showing the purpose for which they are intended.

Nos.	Trade Nos.	U. S. Standard Bolt Size	Hex. Head Cap Screw Size	S. A. E. Std. Screw and Nut	Milled Openings	Extreme Length, Inches	Thickness of Heads, Inches	Weights		Each
								Lbs.	Ounces	
2000	75B	.....	5/16-1/4	1/4	3/8-7/16	6 1/4	5/16	.....	2	\$0.54
2001	75A	1/4	5/16-1/4	1/4	3/8-1/2	6 1/4	5/16	.....	2	.54
2002	75	5/16-1/4	5/16	1/4	3/8-1/2	6 1/4	5/16	.....	2	.54
2003	.....	.....	5/16-3/8	3/8	3/8-7/8	7 1/8	1/4	.....	4	.68
2004	.....	5/16-1/2	.....	.....	1/2-1 1/8	7 1/8	1/4	.....	4	.68
2005	77S	.....	1/4-5/16	1/4-5/16	1/2-1/2	7 1/8	1/4	.....	4	.68
2006	77C	.....	1/4-3/8	1/4-3/8	1/2-7/8	7 1/8	1/4	.....	4	.68
2007	77B	1/4	1/4-3/8	1/4-3/8	1/2-7/8	7 1/8	1/4	.....	4	.68
2008	.....	1/4-1/2	5/16	5/16	1/2-1 1/8	7 1/8	1/4	.....	4	.68
2009	77	3/4	5/16-7/8	5/16-7/8	1/2-5/8	7 1/8	1/4	.....	4	.68
2010	.....	1/4-3/8	5/16	5/16	1/2-1 1/8	8 1/4	5/16	.....	7	.86
2011	.....	1/4	5/16-1/2	5/16-1/2	1/2-3/4	8 1/4	5/16	.....	7	.86
2012	79S	.....	3/8-7/8	3/8-7/8	1/2-5/8	8 1/4	5/16	.....	7	.86
2013	79A	3/8	3/8	3/8	1/2-1 1/8	8 1/4	5/16	.....	7	.86
2014	79E	.....	3/8-1/2	3/8-1/2	1/2-3/4	8 1/4	5/16	.....	7	.86
2015	79D	5/16-3/8	.....	.....	1/2-1 1/8	8 1/4	5/16	.....	7	.86
2016	.....	5/16-1/2	.....	.....	1/2-1 1/8	8 1/4	5/16	.....	7	.86
2017	79	3/8	5/16	5/16	1/2-1 1/8	8 1/4	5/16	.....	7	.86
2018	79C	.....	5/16-1/2	5/16-1/2	5/8-3/4	8 1/4	5/16	.....	7	.86
2019	.....	.....	5/16-5/8	5/16	5/8-1 1/8	9 1/4	3/8	.....	12	1.10
2020	81E	1/2	5/16-5/8	5/16-5/8	5/8-7/8	9 1/4	3/8	.....	12	1.10
2021	81C	3/8	1/2	1/2	1 1/8-3/4	9 1/4	3/8	.....	12	1.10
2022	.....	3/8-7/8	.....	.....	1 1/8-5/8	9 1/4	3/8	.....	12	1.10
2023	81	3/8	.....	.....	1 1/8-5/8	9 1/4	3/8	.....	12	1.10
2024	.....	3/8-1/2	5/8	5/8	1 1/8-7/8	9 1/4	3/8	.....	12	1.10
2025	81B	.....	1/2-5/8	1/2	3/4-1 1/8	9 1/4	3/8	.....	12	1.10
2026	81A	1/2	1/2-5/8	1/2-5/8	3/4-7/8	9 1/4	3/8	.....	12	1.10
2027X	.....	.....	1/2-5/8	1/2-5/8	3/4-1 1/8	10 3/8	1/2	1	.....	1.40
2027	.....	.....	1/2-3/4	1/2-1 1/8	3/4-1	10 3/8	1/2	1	.....	1.40

SHORT HEAVY "S" WRENCHES

BILLINGS & SPENCER



22 1/2 Degree Angle, Double Head

Drop Forged Steel, Dull Black Finish, Polished Heads, Hardened. The heads of the wrenches are plainly marked, showing the purpose for which they are intended.

Nos.	Trade Nos.	U. S. Standard Bolt Size	Hex. Head Cap Screw Size	Milled Openings	Length, Inches	Thickness of Heads, Inches	Weight, Oz.	Each
1400	661D	1/8	1/8-3/8	5/16-3/8	4	5/16	1	\$0.44
1401	661A	1/8-1/4	.....	5/16-1/2	4	5/16	1	.44
1402	661E	1/8	1/8-1/4	5/16-1/4	4	5/16	1	.44
1403	661B	1/8-1/4	5/16	5/16-1/2	4	5/16	1	.44
1404	661F	.....	3/8-1/4	3/8-7/8	4	1/4	1	.44
1405	661G	1/4	5/16-1/2	3/8-1/2	4	1/4	1	.44
1406	.....	.....	5/16-3/8	3/8-7/8	4	1/4	1	.44
1407	661C	5/16-1/4	5/16	1/2-1/2	4	1/4	1	.44
1408	662A	5/16-1/2	.....	1/2-1 1/8	5	5/16	3	.58
1409	662D	1/4	1/4-5/8	5/16-1/2	5	5/16	3	.58
1410	662E	.....	1/4-3/8	5/16-7/8	5	5/16	3	.58
1411	662F	1/4	5/16-3/8	1/2-7/8	5	5/16	3	.58
1412	662B	1/4-1/2	5/16	1/2-1 1/8	5	5/16	3	.58
1413	662G	1/4	5/16-7/8	1/2-5/8	5	5/16	3	.58
1414	662C	1/4-3/8	5/16	1/2-1 1/8	5	5/16	3	.58
1415	.....	1/4	5/16-1/2	1/2-3/4	5	5/16	3	.58
1416	663D	.....	3/8-1/2	5/16-5/8	6 1/4	3/8	6	.78
1417	663E	.....	3/8-1/2	5/16-3/4	6 1/4	3/8	6	.78
1418	663A	5/16-3/8	.....	1/2-1 1/8	6 1/4	3/8	6	.78
1419	663B	5/16-7/8	.....	1/2-1 1/8	6 1/4	3/8	6	.78
1420	663F	.....	5/16-1/2	3/8-3/4	6 1/4	3/8	6	.78
1421	663G	.....	5/16-7/8	5/8-1 1/8	6 1/4	3/8	6	.78
1422	.....	1/2	5/16-3/8	5/8-7/8	6 1/4	3/8	6	.78
1423	663C	3/8-7/8	.....	1 1/8-5/8	6 1/4	3/8	6	.78
1424	664A	3/8-1/2	3/8	1 1/8-7/8	7 1/2	1/2	10	1.06

SET SCREW WRENCHES

BILLINGS & SPENCER



22 1/2 Degree Angle, Double Heads

Drop Forged Steel, Dull Black Finish, Polished Heads, Hardened.

The Heads of the Wrenches are plainly marked showing the purpose for which they are intended.

No.	Milled Opening for Set Screw Size	Length	Thick-ness of Heads	Weight		Each
				Lbs.	Ozs.	
1523	3/16 - 1/4	3 1/2	3/16	.....	1	\$0.40
1524	1/8 - 5/16	4	1/4	.....	2	.48
1525	1/4 - 3/8	4	1/4	.....	2	.48
1526	1/4 - 3/8	5	1/4	.....	3	.58
1527	3/8 - 1/2	5	3/8	.....	3	.58
1528	3/8 - 1/2	6	3/8	.....	5	.70
1529	3/8 - 1/2	6	3/8	.....	5	.70
1530	1/2 - 5/8	6 3/4	3/8	.....	7	.90
1531	1/2 - 5/8	6 3/4	3/8	.....	7	.90
1532	1/2 - 5/8	7 1/2	1/2	.....	9	1.08
1533	1/2 - 5/8	7 1/2	1/2	.....	9	1.08
1534	1/2 - 5/8	8 1/2	1/2	.....	15	1.30
1535	1/2 - 5/8	8 1/2	1/2	.....	15	1.30
1536	3/4 - 3/4	10	1/2	1	2	1.60
1537	3/4 - 3/4	10	1/2	1	2	1.60

CAR WRENCHES

BILLINGS & SPENCER



22 1/2 Degree Angle, Double Head

Drop Forged Steel, Hardened, Natural Finish.

No.	Trade No.	U. S. Standard Bolt Size	Milled Opening	Length	Thick-ness of Heads	Wt. Each, Lbs.	Each
1800	367	3/8 - 1/2	1 1/2 - 1 1/2	12	1 1/2	1.50	\$1.50
1801	370	1/2 - 5/8	1 1/2 - 1 1/2	19	3 1/2	2.50	2.50
1802	371	1/2 - 3/4	1 1/2 - 1 1/2	20	3 1/2	3.10	3.10
1803	373	3/4 - 3/4	1 1/2 - 1 1/2	20	3 1/2	3.10	3.10
1804	374	3/4 - 3/4	1 1/2 - 1 1/2	21	4 3/4	3.70	3.70
1805	376	3/4 - 3/4	1 1/2 - 1 1/2	21	4 3/4	3.70	3.70
1806	377	3/4 - 1	1 1/2 - 1 1/2	22	6 1/2	4.50	4.50
1807	379	3/4 - 1	1 1/2 - 1 1/2	22	6 1/2	4.50	4.50
1808	380	3/4 - 1 1/4	1 1/2 - 1 1/2	23	7 3/4	5.30	5.30
1809	382	1 - 1 1/4	1 1/2 - 1 1/2	23	7 3/4	5.30	5.30
1810	383	1 - 1 1/4	1 1/2 - 2 1/4	24	8 3/4	6.30	6.30
1811	385	1 1/4 - 1 1/4	1 1/2 - 2 1/4	24	8 3/4	6.30	6.30
1812	387	1 1/4 - 1 1/2	1 1/2 - 2 1/4	25	9 3/4	9.00	9.00
1813	389	1 1/4 - 1 1/2	2 1/4 - 2 1/4	25	9 3/4	9.00	9.00

TOOL POST WRENCHES

BILLINGS & SPENCER



Double Head, for Set Screws

Drop Forged Steel, Dull Black Finish, Polished Heads, Hardened.

No.	Open End	Closed End	Length	Thick-ness of Heads	Weight Each Ozs.	Each
1875	1/16	1/16	5 1/2	1/16	5	\$1.12
1876	1/16	1/16	6	1/16	7	1.24
1877	1/16	1/16	6	1/16	7	1.24
1878	1/16	1/16	6	1/16	7	1.24
1879	5/8	5/8	6 3/4	5/8	11	1.44
1880	1 1/4	1 1/4	6 3/4	5/8	11	1.44
1881	1 1/4	1 1/4	6 3/4	5/8	11	1.44
1882	3/4	3/4	7 1/2	1 1/8	16	1.64

CONSTRUCTION WRENCHES

BILLINGS & SPENCER



15 Degree Angle

Drop Forged Steel, Handle Used for Lining Up Bolt Holes.

No.	U.S. Bolt Size	Milled Opening	Lgth.	Thick-ness of Head	Weight		Each	
					Lbs.	Ozs.	Unfin.	Hard
1675	3/8	1 1/2	9 1/2	1/2	.....	8	\$0.70	\$0.90
1676	1/2	2 1/2	9 1/2	1/2	.....	8	.70	.90
1677	1/2	3 1/2	11 3/4	1/2	1	.....	.90	1.16
1678	3/4	3 1/2	11 3/4	1/2	1	.....	.90	1.16
1679	3/4	1 1/2	13 1/2	1/2	1	8	1.24	1.60
1680	3/4	1 1/2	15 1/2	3/8	2	5	1.72	2.20
1681	3/4	1 1/2	17 1/2	1 1/8	2	13	2.36	3.00
1682	1	1 1/2	19	3/4	4	3	3.20	4.20
1683	1 1/4	1 1/2	21	3/4	6	14	4.40	6.00
1684	1 1/4	2	21	3/4	7	.....	4.40	6.00

STRUCTURAL WRENCHES

BILLINGS & SPENCER



Straight Opening and Off-Set Head

Drop Forged Steel, Designed for Structural Iron Work-ers. The Handle is used for bringing bolt holes into align-ment.

No.	U.S. Bolt Size	Open-ings	Lgth.	Thick-ness of Head	Hndl. Offset	Weight		Each	
						Lbs.	Ozs.	Unfin.	Hard
1700	1/4	1 1/2	8	3/8	1 1/2	.....	5	\$0.66	\$0.80
1701	1/2	1 1/2	8	3/8	1 1/2	.....	5	.66	.80
1702	3/4	1 1/2	9 1/2	3/8	1 1/2	.....	7	.80	1.04
1703	1/2	1 1/2	9 1/2	3/8	1 1/2	.....	7	.80	1.04
1704	1/2	1 1/2	11 3/4	1/2	1	.....	12	1.04	1.40
1705	3/4	1 1/2	11 3/4	1/2	1	.....	12	1.04	1.40
1706	3/4	1 1/2	13 1/2	5/8	1 1/4	1	9	1.48	1.96
1707	3/4	1 1/2	15 1/2	1 1/8	1 1/4	2	10	2.04	2.68
1708	3/4	1 1/2	17	3/4	1 1/4	3	11	2.80	3.60
1709	1	1 1/2	19	1 1/8	1 3/4	3	15	3.80	5.00
1710	1 1/4	1 1/2	19	1 1/8	1 3/4	4	1	3.80	5.00
1711	1 1/4	2 1/2	24	1	1 3/4	.....	.....	7.00	8.50

DROP FORGED WRENCH SETS

BILLINGS & SPENCER

The Wrenches in these Sets are drop forged from specially selected open hearth steel to our specifications. The steel is analyzed in modern metallurgical laboratory before being used. In addition these tools are heat treated after machining to toughen and harden the steel. They are smoothly polished and finished in attractive "Duro" black rust-proof finish with heads brightened and lacquered.

The cases illustrated are made of heavy tan colored canvas, and contain a pocket for each wrench.

The heads of the wrenches are plainly marked showing the purpose for which they are intended.

LIGHT SERVICE

For Manufacturers Standard Nuts and Bolts.

These Sets are made up of Standard Light Service "S" Wrenches carefully selected for the work the Set is designed for.

Per Set

No. 1 Set—Consists of 5 Light Service Wrenches, One Each Nos. 2002, 2009, 2017, 2023 and 2032 as Described Below, Weight Per Set 4 Lbs. \$4.58

No. 1R Set—Same as No. 1 in Canvas Roll 5.13

Contents of No. 1 Set.

Nos.	Trade Nos.	For Mfg. Std. Nuts Size Bolt	Milled Openings	Lgth., Inches	Thick-ness of Heads, Inches	Each
2002	75	$\frac{3}{8}$ - $\frac{1}{4}$	$\frac{3}{8}$ - $\frac{1}{2}$	6 $\frac{1}{4}$	$\frac{5}{16}$	\$0.54
2009	77	$\frac{1}{4}$ - $\frac{3}{8}$	$\frac{1}{2}$ - $\frac{5}{8}$	7 $\frac{1}{8}$	$\frac{1}{4}$	.68
2017	79	$\frac{3}{8}$ - $\frac{3}{8}$	$\frac{5}{8}$ - $\frac{1}{2}$	8 $\frac{1}{4}$	$\frac{5}{16}$	.86
2023	81	$\frac{3}{8}$ - $\frac{7}{8}$	$\frac{1}{2}$ - $\frac{3}{4}$	9 $\frac{1}{4}$	$\frac{3}{8}$	1.10
2032	83	$\frac{7}{8}$ - $\frac{1}{2}$	$\frac{3}{4}$ - $\frac{1}{2}$	10 $\frac{3}{8}$	$\frac{1}{2}$	1.40

For S. A. E. Cap Screws and Nuts. Per Set

No. 2 Set—Consists of 5 Light Service Wrenches, One Each Nos. 2001, 2013, 2026, 2038 and 2044 as Described Below, Weight Each 5 $\frac{1}{2}$ Lbs. \$6.50

No. 2R Set—Same as No. 2 in Canvas Roll 7.05

Contents of No. 2 Set.

Nos.	Trade Nos.	Size Screw S. A. E. Head and Nut	Milled Openings	Lgth., Inches	Thick-ness of Heads, Inches	Each
2001	75a	$\frac{1}{2}$	$\frac{3}{8}$ - $\frac{1}{2}$	6 $\frac{1}{4}$	$\frac{5}{16}$	\$0.54
2013	79a	$\frac{3}{8}$	$\frac{3}{8}$ - $\frac{1}{2}$	8 $\frac{1}{4}$	$\frac{5}{16}$	.86
2026	81a	$\frac{1}{2}$ - $\frac{3}{8}$	$\frac{3}{4}$ - $\frac{7}{8}$	9 $\frac{1}{4}$	$\frac{3}{8}$	1.10
2038	83a	$\frac{3}{8}$ - $\frac{1}{2}$	$\frac{1}{2}$ - 1	10 $\frac{3}{8}$	$\frac{1}{2}$	2.00
2044	85b	$\frac{3}{8}$	1 $\frac{1}{8}$ - 1 $\frac{1}{4}$	12	$\frac{1}{2}$	2.00

DOUBLE HEAD ENGINEERS

15 Degree Angle.

For Hexagon Head Cap Screws and U. S. Standard Nuts.

Per Set

No. 5 Set—Consists of 7 Double Head Engineers Wrenches, One Each Nos. 1109, 1112, 1118X, 1120X, 1126, 1134 and 1139 as Described Below, Weight Per Set 6 $\frac{1}{2}$ Lbs. \$6.54

No. 5R Set—Same as No. 5 in Canvas Roll 7.29

Contents of No. 5 Set.

Nos.	Trade Nos.	For Hex. Head Cap Screws & U. S. Std. Nuts	Milled Openings	Lgth., Inches	Thick-ness of Heads, Inches	Each
1109	725	$\frac{1}{4}$	$\frac{1}{8}$ - $\frac{1}{2}$	5	$\frac{5}{16}$	\$0.50
1112	25	$\frac{1}{8}$	$\frac{1}{2}$ - $\frac{1}{2}$	5 $\frac{1}{2}$	$\frac{5}{16}$	.50
1118X	27c	$\frac{3}{8}$	$\frac{1}{2}$ - $\frac{1}{2}$	6 $\frac{1}{2}$	$\frac{1}{2}$	.62
1120X	28s	$\frac{7}{8}$	$\frac{5}{8}$ - $\frac{3}{4}$	7	$\frac{3}{8}$	.74
1126	731a	$\frac{1}{2}$	$\frac{3}{4}$ - $\frac{7}{8}$	9	$\frac{1}{2}$	.90
1134	34	$\frac{5}{8}$	$\frac{7}{8}$ - 1	11	$\frac{3}{4}$	1.36
1139	736	$\frac{3}{4}$	1 - 1 $\frac{1}{4}$	12	$\frac{3}{4}$	1.92

DOUBLE HEAD ENGINEERS

S. A. E. Standard, 15 Degree Angle.

Handy for Automobile Mechanics.

Per Set

No. 8 Set—Consists of 5 Double Head Engineers Wrenches, 1 Each Nos. 1105, 1118X, 1126, 1132X and 1140X as Described Below, Weight Per Set 4 Lbs. \$4.96

No. 8R Set—Same as No. 8 in Canvas Roll 5.51

Contents of No. 8 Set.

Nos.	Trade Nos.	Size Screw S. A. E. Head and Nut	Milled Openings	Lgth., Inches	Thick-ness of Heads, Inches	Each
1105	723a	$\frac{1}{8}$	$\frac{3}{8}$ - $\frac{1}{2}$	4 $\frac{1}{2}$	$\frac{5}{16}$	\$0.42
1118X	27c	$\frac{3}{8}$	$\frac{3}{8}$ - $\frac{1}{2}$	6 $\frac{1}{2}$	$\frac{1}{2}$	.62
1126	731a	$\frac{1}{2}$ - $\frac{3}{8}$	$\frac{3}{4}$ - $\frac{7}{8}$	9	$\frac{1}{2}$	.90
1132X	33c	$\frac{5}{8}$ - $\frac{1}{2}$	$\frac{1}{2}$ - 1	10	$\frac{3}{8}$	1.10
1140X	737	$\frac{3}{4}$	1 $\frac{1}{8}$ - 1 $\frac{1}{4}$	12	$\frac{3}{4}$	1.92

THIN CHECK NUT

For S. A. E. Standard Nuts and Cap Screws.

Extra Thin, 15 Degree Angle. Double Heads.

Per Set

No. 14 Set—Consists of 5 Check Nut Wrenches, One Each Nos. 1350X, 1353X, 1356X, 1359X and 1362X as Described Below, Weight Per Set 2 Lbs. \$4.74

No. 14R Set—Same as No. 14 with Canvas Roll 5.29

Contents of No. 14 Set.

Nos.	Trade Nos.	Size Screw S. A. E. Head and Nut	Milled Openings	Lgth., Inches	Thick-ness of Heads, Inches	Each
1350X	623e	$\frac{1}{8}$	$\frac{3}{8}$ - $\frac{1}{2}$	4 $\frac{1}{2}$	$\frac{5}{16}$	\$0.50
1353X	626x	$\frac{3}{8}$	$\frac{3}{8}$ - $\frac{1}{2}$	5 $\frac{1}{2}$	$\frac{1}{2}$	.64
1356X	630e	$\frac{1}{2}$ - $\frac{3}{8}$	$\frac{3}{4}$ - $\frac{7}{8}$	7	$\frac{1}{2}$	.80
1359X	632x	$\frac{5}{8}$ - $\frac{1}{2}$	$\frac{1}{2}$ - 1	8 $\frac{1}{2}$	$\frac{3}{4}$	1.12
1362X	635g	$\frac{3}{4}$ - $\frac{7}{8}$	1 $\frac{1}{8}$ - 1 $\frac{1}{4}$	10 $\frac{1}{2}$	$\frac{3}{4}$	1.68

DOUBLE HEAD ENGINEERS

15 Degree Angle.

For Hexagon Head Cap Screws and Nuts.

Per Set

No. 15 Set—Consists of 8 Wrenches, One Each as Described Below, Wt. Per Set 6 Lbs. \$7.28

No. 15R Set—Same as No. 15 in Canvas Roll 8.28

Contents of No. 15 Set.

Nos.	Trade Nos.	Size of Screw	Milled Openings	Lgth., Inches	Thick-ness of Heads, Inches	Each
1109 Cap	725	$\frac{1}{4}$ - $\frac{1}{8}$	$\frac{1}{8}$ - $\frac{1}{2}$	5	$\frac{5}{16}$	\$0.50
1116 Cap	727	$\frac{3}{8}$ - $\frac{1}{8}$	$\frac{1}{2}$ - $\frac{3}{8}$	6	$\frac{1}{2}$	.62
1125 Cap	731	$\frac{1}{2}$ - $\frac{3}{8}$	$\frac{3}{4}$ - $\frac{1}{2}$	9	$\frac{1}{2}$	.90
1133 Cap	733	$\frac{5}{8}$ - $\frac{3}{4}$	$\frac{7}{8}$ - 1	10	$\frac{3}{4}$	1.10
1112 Nut	25	$\frac{1}{8}$ - $\frac{1}{8}$	$\frac{1}{2}$ - $\frac{1}{2}$	5 $\frac{1}{2}$	$\frac{5}{16}$	.50
1123 Nut	29	$\frac{3}{8}$ - $\frac{1}{8}$	$\frac{1}{2}$ - $\frac{1}{2}$	7	$\frac{3}{8}$	.74
1132 Nut	33	$\frac{1}{2}$ - $\frac{1}{8}$	$\frac{3}{4}$ - $\frac{3}{4}$	10	$\frac{3}{4}$	1.10
1140 Nut	37	$\frac{3}{4}$ - $\frac{3}{4}$	1 $\frac{1}{8}$ - 1 $\frac{1}{4}$	12	$\frac{3}{4}$	1.92

MOLYBDENUM ENGINEERS WRENCHES



Billings Life-Time Wrenches Are Made of Chrome-Mo-lyb-den-um Steel—The Super Alloy—(Billings Formula)

These long, thin, Powerful wrenches with "Spear" shaped heads may be used in close or cramped quarters where an ordinary carbon wrench would be ineffectual.

The handles of the wrenches are rounded and smoothly finished, affording a comfortable grip for the user, a point which will be appreciated by the mechanic who has to use a wrench of this kind for long periods.

The wrenches are finished in nickel over copper plating with heads buffed, a beautiful and permanent rust-proof finish.

They are hardened and tempered by our exclusive process, under the most scientific heat control devices, insuring that these Powerful Wrenches Will Last a Life-time.

Nickel Plated, 15 Degree Angle, Double Head

Nos.	Equivalent E. & S. Carbon Wrench	Milled Openings	U. S. S. Bolt Size	Hex. Head Cap Screw Size	S. A. E. Nut and Bolt Size	Extreme Length, Inches	Thick- ness of Head, Inches	Weight Each		Nickel, Each
								Lbs.	Oz.	
M1721	1100	$\frac{1}{8}$ - $\frac{3}{8}$	$\frac{1}{8}$	$\frac{1}{8}$ - $\frac{1}{8}$	.....	4 $\frac{1}{4}$	$\frac{11}{16}$	.....	1 $\frac{1}{2}$	\$0.80
M1021	1101	$\frac{1}{8}$ - $\frac{3}{8}$	$\frac{1}{8}$ - $\frac{1}{8}$	$\frac{1}{8}$	.....	4 $\frac{1}{4}$	$\frac{11}{16}$	.....	1 $\frac{1}{2}$	.80
M1722	1102	$\frac{1}{8}$ - $\frac{3}{8}$	$\frac{1}{8}$	$\frac{1}{8}$ - $\frac{1}{4}$	$\frac{1}{4}$	4 $\frac{1}{4}$	$\frac{11}{16}$	.....	1 $\frac{1}{2}$	.80
M1723	1104	$\frac{3}{8}$ - $\frac{1}{2}$	.....	$\frac{1}{8}$ - $\frac{1}{4}$	$\frac{1}{4}$	4 $\frac{1}{4}$	$\frac{11}{16}$	.....	1 $\frac{1}{2}$	.80
M1022	1103	$\frac{1}{8}$ - $\frac{1}{2}$	$\frac{1}{8}$ - $\frac{1}{4}$	$\frac{1}{8}$ - $\frac{1}{8}$	$\frac{1}{8}$	4 $\frac{3}{4}$	$\frac{11}{16}$	.....	2 $\frac{1}{2}$	.96
M1023	1107	$\frac{1}{8}$ - $\frac{1}{2}$	$\frac{1}{8}$ - $\frac{1}{4}$	$\frac{1}{8}$ - $\frac{1}{8}$	$\frac{1}{8}$	4 $\frac{3}{4}$	$\frac{11}{16}$	.....	2 $\frac{1}{2}$	.96
M1723A	1105	$\frac{3}{8}$ - $\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{8}$ - $\frac{1}{8}$	$\frac{1}{8}$	4 $\frac{3}{4}$	$\frac{11}{16}$	.....	2 $\frac{1}{2}$	.96
M1024	1108	$\frac{1}{8}$ - $\frac{3}{8}$	$\frac{1}{8}$ - $\frac{1}{8}$	.....	.....	5 $\frac{1}{2}$	$\frac{1}{4}$	.....	3 $\frac{1}{2}$	1.16
M1725	1109	$\frac{1}{8}$ - $\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{4}$ - $\frac{1}{8}$	$\frac{1}{4}$ - $\frac{1}{8}$	5 $\frac{1}{2}$	$\frac{1}{4}$	.....	3 $\frac{1}{2}$	1.16
M1725A	1110	$\frac{1}{8}$ - $\frac{1}{2}$	.....	$\frac{1}{4}$ - $\frac{3}{8}$	$\frac{1}{4}$ - $\frac{3}{8}$	5 $\frac{1}{2}$	$\frac{1}{4}$	.....	3 $\frac{1}{2}$	1.16
M1725B	1111	$\frac{1}{8}$ - $\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{8}$ - $\frac{3}{8}$	$\frac{1}{8}$ - $\frac{3}{8}$	5 $\frac{1}{2}$	$\frac{1}{4}$	.....	3 $\frac{1}{2}$	1.16
M1025	1112	$\frac{1}{2}$ - $\frac{3}{8}$	$\frac{1}{4}$ - $\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	5 $\frac{1}{2}$	$\frac{1}{4}$	.....	3 $\frac{1}{2}$	1.16
M1726	1113	$\frac{1}{2}$ - $\frac{5}{8}$	$\frac{1}{4}$	$\frac{1}{8}$ - $\frac{1}{8}$	$\frac{1}{8}$ - $\frac{1}{8}$	6 $\frac{1}{2}$	$\frac{1}{2}$	.....	5	1.40
M1026	1114	$\frac{1}{2}$ - $\frac{1}{2}$	$\frac{1}{4}$ - $\frac{3}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	6 $\frac{1}{2}$	$\frac{1}{2}$	.....	5	1.40
M1727	1116	$\frac{1}{2}$ - $\frac{5}{8}$	.....	$\frac{3}{8}$ - $\frac{1}{8}$	$\frac{3}{8}$ - $\frac{1}{8}$	6 $\frac{1}{2}$	$\frac{1}{2}$	.....	5	1.40
M1027	1118	$\frac{3}{8}$ - $\frac{1}{2}$	$\frac{1}{8}$ - $\frac{3}{8}$	.....	.....	6 $\frac{1}{2}$	$\frac{1}{2}$	.....	5	1.40
M1027C	1118X	$\frac{1}{2}$ - $\frac{1}{2}$	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	6 $\frac{1}{2}$	$\frac{1}{2}$	.....	5	1.40
M1728	1117	$\frac{1}{2}$ - $\frac{3}{4}$	$\frac{1}{8}$ - $\frac{3}{4}$	$\frac{3}{8}$ - $\frac{1}{2}$	$\frac{3}{8}$ - $\frac{1}{2}$	7 $\frac{3}{4}$	$\frac{3}{8}$	.....	9	1.74
M1028	1119	$\frac{1}{2}$ - $\frac{3}{4}$	$\frac{1}{8}$ - $\frac{3}{4}$	$\frac{3}{8}$ - $\frac{1}{2}$	$\frac{3}{8}$ - $\frac{1}{2}$	7 $\frac{3}{4}$	$\frac{3}{8}$	.....	9	1.74
M1028S	1120X	$\frac{3}{4}$ - $\frac{3}{4}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	7 $\frac{3}{4}$	$\frac{3}{8}$	.....	9	1.74
M1729	1120	$\frac{3}{4}$ - $\frac{3}{4}$	.....	$\frac{1}{8}$ - $\frac{1}{2}$	$\frac{1}{8}$ - $\frac{1}{2}$	7 $\frac{3}{4}$	$\frac{3}{8}$	.....	9	1.74
M1029	1123	$\frac{1}{2}$ - $\frac{3}{4}$	$\frac{3}{8}$ - $\frac{1}{8}$	.....	.....	7 $\frac{3}{4}$	$\frac{3}{8}$	.....	9	1.74
M1030	1124	$\frac{1}{2}$ - $\frac{3}{4}$	$\frac{3}{8}$ - $\frac{1}{2}$	$\frac{5}{8}$	$\frac{5}{8}$	7 $\frac{3}{4}$	$\frac{3}{8}$	.....	9	1.74
M1731	1125	$\frac{3}{4}$ - $\frac{1}{2}$	.....	$\frac{1}{2}$ - $\frac{1}{8}$	$\frac{1}{2}$	9 $\frac{1}{4}$	$\frac{1}{2}$	.....	12 $\frac{1}{2}$	2.14
M1731A	1126	$\frac{3}{4}$ - $\frac{3}{4}$	$\frac{1}{2}$	$\frac{1}{2}$ - $\frac{5}{8}$	$\frac{1}{2}$ - $\frac{5}{8}$	9 $\frac{1}{4}$	$\frac{1}{2}$	.....	12 $\frac{1}{2}$	2.14
M1031	1128	$\frac{3}{4}$ - $\frac{3}{4}$	$\frac{1}{2}$ - $\frac{1}{2}$	$\frac{5}{8}$	$\frac{5}{8}$	9 $\frac{1}{4}$	$\frac{1}{2}$	.....	12 $\frac{1}{2}$	2.14
M1731B	1130	$\frac{1}{2}$ - $\frac{3}{4}$	$\frac{1}{2}$	$\frac{1}{2}$ - $\frac{5}{8}$	$\frac{1}{2}$	9 $\frac{1}{4}$	$\frac{1}{2}$	.....	12 $\frac{1}{2}$	2.14
M1032	1129	$\frac{3}{4}$ - $\frac{3}{4}$	$\frac{1}{2}$ - $\frac{1}{8}$	.....	.....	9 $\frac{1}{4}$	$\frac{1}{2}$	.....	12 $\frac{1}{2}$	2.14
M1033A	1131X	$\frac{3}{4}$ - $\frac{3}{4}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{5}{8}$ - $\frac{5}{8}$	9 $\frac{1}{4}$	$\frac{1}{2}$	.....	12 $\frac{1}{2}$	2.14
M1033	1132	$\frac{3}{4}$ - $\frac{3}{4}$	$\frac{1}{2}$ - $\frac{1}{8}$	$\frac{5}{8}$	$\frac{5}{8}$	9 $\frac{1}{4}$	$\frac{1}{2}$	.....	12 $\frac{1}{2}$	2.14
M1733	1133	$\frac{3}{4}$ - 1	$\frac{1}{2}$	$\frac{5}{8}$ - $\frac{3}{4}$	$\frac{5}{8}$ - $\frac{1}{2}$	10 $\frac{3}{4}$	$\frac{1}{2}$	1	3	2.64
M1033C	1132X	$\frac{1}{2}$ - 1	.....	$\frac{5}{8}$	$\frac{5}{8}$ - $\frac{1}{2}$	10 $\frac{3}{4}$	$\frac{1}{2}$	1	3	2.64
M1034	1134	$\frac{3}{4}$ - 1 $\frac{1}{8}$	$\frac{1}{2}$ - $\frac{5}{8}$	$\frac{5}{8}$	$\frac{5}{8}$ - $\frac{3}{4}$	10 $\frac{3}{4}$	$\frac{1}{2}$	1	3	2.64
M1734	1135	$\frac{3}{4}$ - 1 $\frac{1}{8}$	$\frac{1}{2}$	$\frac{5}{8}$ - $\frac{3}{4}$	$\frac{5}{8}$	10 $\frac{3}{4}$	$\frac{1}{2}$	1	3	2.64
M1034A	1136X	$\frac{1}{2}$ - 1 $\frac{1}{8}$	$\frac{5}{8}$	.....	$\frac{5}{8}$ - $\frac{3}{4}$	10 $\frac{3}{4}$	$\frac{1}{2}$	1	3	2.64
M1035	1136	$\frac{1}{2}$ - 1 $\frac{1}{8}$	$\frac{5}{8}$ - $\frac{5}{8}$	.....	$\frac{3}{4}$	10 $\frac{3}{4}$	$\frac{1}{2}$	1	3	2.64
M1735	1138	1 - 1 $\frac{1}{4}$	.....	$\frac{3}{4}$ - $\frac{3}{4}$	$\frac{1}{2}$	12 $\frac{1}{4}$	$\frac{1}{2}$	1	8	3.18
M1036	1137	$\frac{1}{2}$ - 1 $\frac{1}{4}$	$\frac{5}{8}$ - $\frac{3}{4}$	1	$\frac{3}{4}$	12 $\frac{1}{4}$	$\frac{1}{2}$	1	8	3.18
M1736	1139	1 - 1 $\frac{1}{4}$	$\frac{3}{4}$	$\frac{3}{4}$ - 1	$\frac{1}{2}$ - $\frac{3}{4}$	12 $\frac{1}{4}$	$\frac{1}{2}$	1	8	3.18
M1037	1140	1 $\frac{1}{8}$ - 1 $\frac{1}{4}$	$\frac{5}{8}$ - $\frac{3}{4}$	1	$\frac{3}{4}$ - $\frac{3}{4}$	12 $\frac{1}{4}$	$\frac{1}{2}$	1	8	3.18
M1737	1140X	1 $\frac{1}{8}$ - 1 $\frac{1}{4}$	$\frac{3}{4}$	$\frac{3}{4}$ - 1	$\frac{3}{4}$	12 $\frac{1}{4}$	$\frac{1}{2}$	1	8	3.18

Mo-lyb-den-um has but recently come into prominence in the field of commercial alloy steels. For some time it has been used as a fairly satisfactory substitute for Tungsten in High Speed Steels.

The discovery of extensive deposits of this metal in Colorado,—at about the time the World War created a shortage of all other alloying elements,—led to further research on the effect of Mo-lyb-den-um in steel. It was determined that Mo-lyb-den-um produced much the same effect as the most prominent steel alloying elements, Nickel and Chromium. It was further determined that Steels containing Chromium and Mo-lyb-den-um possessed physical properties far superior to any previously known alloy steel.

MOLYBDENUM GENERAL SERVICE WRENCHES



Nickel Plated, 22 1/2° Angle, Thin Double Heads

The use of Chrome-Mo-lyb-den-um steel (Billings' formula) marks a distinct advance in wrench manufacture and is the result of painstaking research and experiment not only by the engineers of the Billings & Spencer Company but by the leading metallurgists in the Steel Industry as well. These tests and experiments covered a period of years and resulted in the development of a super alloy steel (Billings' Chrome-Mo-lyb-den-um formula) which makes possible a stronger and tougher wrench than any wrench now on the market.

The Billings' General Service "S" Wrench is made in the same dies as the Light Service Carbon Wrench, but thru the use of Chrome-Mo-lyb-den-um steel (Billings' formula) these wrenches are by far the strongest, toughest, and most practical "S" wrenches ever offered the American mechanic.

The Billings' Mo-lyb-den-um General Service "S" Wrench is designed with long, thin, powerful jaws which will permit the use of these wrenches in close quarters where an ordinary carbon wrench could not be used.

No.	Equiv. B. & S. Carbon Wrench	Milled Open- ings	U.S.S. Bolt Size	Hex. Hd. Cap. Sc. Size	S.A.E. Nut and Bolt Size	Extreme Length	Thick- ness of Head	Weight		Nickel Plated Each
								Lbs.	Ozs.	
M1075B	2000	3/8 - 7/16	...	3/8 - 1/4	...	6 1/4	3/16	...	2	\$1.30
M1075A	2001	3/8 - 1/2	...	3/8 - 3/8	...	6 1/4	3/16	...	2	1.30
M1075	2002	1/2 - 1/2	...	1/2 - 1/2	...	6 1/4	3/16	...	2	1.30
M1077S	2005	1/2 - 1/2	...	1/2 - 1/2	...	7 1/8	1/4	...	4	1.65
M1077B	2007	1/2 - 3/8	...	1/2 - 3/8	...	7 1/8	1/4	...	4	1.65
M1077	2009	1/2 - 5/8	...	1/2 - 5/8	...	7 1/8	1/4	...	4	1.65
M1079B	2012X	5/8 - 1/2	...	5/8 - 1/2	...	8 1/4	3/16	...	7	2.05
M1079S	2012	5/8 - 5/8	...	5/8 - 5/8	...	8 1/4	3/16	...	7	2.05
M1079A	2013	5/8 - 1 1/8	...	5/8 - 1 1/8	...	8 1/4	3/16	...	7	2.05
M1079	2017	5/8 - 1 1/8	...	5/8 - 1 1/8	...	8 1/4	3/16	...	7	2.05
M1079C	2018	5/8 - 3/4	...	5/8 - 3/4	...	8 1/4	3/16	...	7	2.05
M1081	2023	1 1/8 - 1 1/8	...	1 1/8 - 1 1/8	...	9 1/4	3/8	...	12	2.50
M1081B	2025	3/4 - 1 1/8	...	3/4 - 1 1/8	...	9 1/4	3/8	...	12	2.50
M1081A	2026	3/4 - 7/8	...	3/4 - 7/8	...	9 1/4	3/8	...	12	2.50
M1083	2032	1 - 1 1/8	...	1 - 1 1/8	...	10 3/8	1/2	...	1	3.10
M1083B	2035	7/8 - 1	...	7/8 - 3/4	...	10 3/8	1/2	...	1	3.10
M1083A	2038	1 - 1	...	1 - 3/4	...	12	1/2	...	2	3.90
M1085	2041	1 - 1 1/8	...	1 - 7/8	...	12	1/2	...	2	3.90
M1085C	2043	1 1/8 - 1 1/4	...	1 - 1	...	12	1/2	...	2	3.90
M1085B	2044	1 1/8 - 1 1/4	...	7/8 - 1	...	12	1/2	...	2	3.90

MOLYBDENUM STRUCTURAL WRENCHES



Nickel Plated, Straight Opening and Offset Head

The Structural Wrench, like the Construction Wrench, is used by men engaged in arduous labor, under the most dangerous conditions, where a man's life may be endangered by a weak wrench.

Billings' Chrome-Mo-lyb-den-um structural wrenches possess reserve strength in excess of any strain that the user may place on them. This additional strength and toughness is made possible by the use of Chrome-Mo-lyb-den-um steel—The Super-Alloy—(Billings' formula).

This alloy steel was selected for these wrenches by Billings' engineers in collaboration with the leading metallurgists in the Steel Industry after exhaustive tests and experiments with all known alloys.

This combination tool was designed originally for struc-

tural iron workers and for use on construction work where an offset wrench was necessary for clearance and for the protection of the hands of the user. This type of wrench is now very popular with machine erectors, truck and bus assemblers and repairmen who have found this wrench more practical for the work than ordinary wrenches because of its greater length, offset head and greater strength.

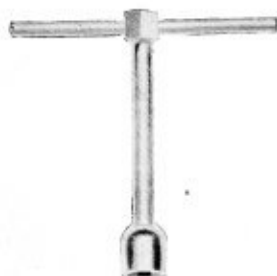
The tang is used for bringing bolt holes into alignment and serves as a comfortable handle for the user.

These wrenches are finished in dull nickel over copper plate, a practical rust-proof finish. They are hardened and tempered by our exclusive method, under the most complete scientific heat control devices, insuring that These Powerful Wrenches Will Last a Life-Time.

No.	Equiv. B. & S. Carbon Wrench	Milled Open- ings	U.S.S. Bolt Size	Hex. Hd. Cap. Sc. Size	S.A.E. Nut and Bolt Size	Extreme Length	Thick- ness of Head	Handles Offset	Weight		Nickel Plated Each
									Lbs.	Ozs.	
M1903	1702	1 1/8	3/8	...	...	9 1/2	1/2	7/8	...	7	\$2.35
M1904	1703	1 1/8	1/2	...	...	9 1/2	1/2	7/8	...	7	2.35
M1905	1704	1 1/8	1/2	...	...	11 3/4	1/2	1	...	12	3.15
M1906	1705	1	3/8	...	...	11 3/4	1/2	1	...	12	3.15
M1907	1706	1 1/4	5/8	...	...	13 1/2	5/8	1 1/4	1	9	4.40
M1908	1707	1 1/2	3/4	1	...	15 1/2	1 1/2	1 1/4	2	10	6.00
M1909	1708	1 1/2	7/8	1 1/4	...	17	3/4	1 1/2	3	11	8.15
M1910	1709	1 1/2	1	1 3/8	1 1/2	19	1 1/2	1 3/4	3	15	11.35

T HANDLE SOCKET WRENCHES

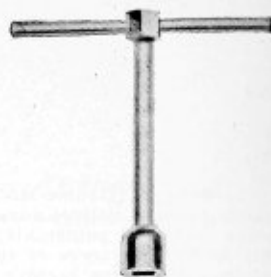
BILLINGS & SPENCER



Hexagon Opening.

With Pin Handle

These Socket Wrenches are drop forged from specially selected open hearth steel to our specifications. The steel is analyzed in our modern metallurgical laboratory before being used. In addition these tools are heat treated after machining to toughen and harden the steel. They are smoothly polished and finished in our attractive "Duro" black rust-proof finish.



Square Opening.

With Hexagon Openings

Wrench Nos.	Trade Nos.	For U. S. Standard Nut, Size Bolt	For Cap Screw, Diameter Screw	S. A. E. Standard Screw and Nut	Short Diameter Broached Opening, Inches	Extreme Length, Inches	Diam. Head, Inches	Hex. End Same Size as U. S. Nut for Size Bolt, Inches	Length of Pin Handle, Inches	Weight Each		Each
										Lbs.	Ounces	
721X					.260	4	3/8	1/8	4		2	\$0.80
720A					.260	4	1/2	1/8	4		2	.80
721A	961A	1/8			.260	4	1/2	1/8	4		2	.80
721B					.260	4	1/2	1/8	4		2	.80
722A	962D		5/16		.260	4 1/2	5/8	1/4	4 1/2		3 1/2	.88
722B	963A	5/16			.260	4 1/2	5/8	1/4	4 1/2		3 1/2	.98
722C	963D		1/4	1/4	.260	4 1/2	5/8	1/4	4 1/2		3 1/2	.98
723A	964A	1/4	5/16	5/16	.260	5 1/4	3/4	5/16	5 1/4		5	1.04
724A	965D		3/8	3/8	.260	5 3/4	7/8	3/8	5 3/4		7	1.16
724B	965A	5/16			.260	5 3/4	7/8	3/8	5 3/4		7	1.16
725A	966D		1/2	1/2	.260	6 1/4	1	1/2	6 1/4		11	1.26
725B	967A	3/8			.260	6 1/4	1 1/4	1/2	6 1/4		11	1.42
725C	967D		1/2	1/2	.260	6 1/4	1 1/4	1/2	6 1/4		11	1.42
726A	968A	1/2			.260	7	1 1/4	1/2	7	1	2	1.54
726B	968D		3/4	3/4	.260	7	1 1/4	1/2	7	1	2	1.54
726C	969A	1/2			.260	7	1 1/4	1/2	7	1	2	1.74
727X				5/8	.260	7 3/8	1 1/2	1/2	7 3/8	1	11	1.96
727A	970A	5/8			.260	7 3/8	1 1/2	1/2	7 3/8	1	11	1.96
727B	970D		3/4	3/4	1.25	7 3/8	1 1/2	1/2	7 3/8	1	11	1.96
728A	971A	3/4			1.25	8 5/8	1 5/8	3/4	8 5/8	2	6	2.20
728B	971D		7/8	7/8	1.25	8 5/8	1 5/8	3/4	8 5/8	2	6	2.60
729A	972A	3/4	1	7/8	1.25	9 1/4	1 7/8	3/4	9 1/4	3	2	3.00
730A	974D		1 1/8		1.25	10	2 1/4	7/8	10	4	6	3.40
730B	975A	7/8			1.25	10	2 1/4	7/8	10	4	6	3.70
730C	975D		1 1/4	1	1.25	10	2 1/4	7/8	10	4	6	3.70
731A	976A	1		1 1/8	1.25	10 3/4	2 1/2	1	10 3/4	6	3	4.24

With Square Openings

Wrench Nos.	Trade Nos.	For U. S. Standard Nut, Size Bolt	For Cap Screw, Diameter Screw	For Set Screw, Size Screw	Short Diameter Broached Opening, Inches	Extreme Length, Inches	Diam. Head, Inches	Hex. End Same Size as U. S. Nut for Size Bolt, Inches	Length of Pin Handle, Inches	Weight Each		Each
										Lbs.	Ounces	
720J	960H			1/8	1/4	3 5/8	1/8	1/8	3		1	\$0.70
721J	961H			5/16	1/4	4	1/8	1/8	4		2	.80
721K	961J			1/4	1/4	4	1/2	1/8	4		2	.80
722J	962H			5/16	1/4	4 1/2	5/8	1/4	4 1/2		3 1/2	.88
723J	963H	1/4	3/8		1/4	5 1/4	3/4	5/16	5 1/4		5	.98
724J	965H	5/16			1/4	5 3/4	7/8	3/8	5 3/4		7	1.16
725J	966H	1/4	3/8	1/2	1/4	6 1/4	1	1/2	6 1/4		11	1.26
725K	967H		1/2	1/2	1/4	6 1/4	1 1/4	1/2	6 1/4		11	1.42
726J	967X	5/16			1/4	7	1 1/4	1/2	7	1	2	1.42
726K	968H		1/2	5/8	1/4	7	1 1/4	1/2	7	1	2	1.54
726L	968P	3/8	5/16		1/4	7	1 1/4	1/2	7	1	2	1.54
727J	969H		5/8	3/4	1/4	7 3/8	1 1/2	1/2	7 3/8	1	11	1.74
727K	970X	1/2			1/4	7 3/8	1 1/2	1/2	7 3/8	1	11	1.96
728J	971H	1/2	3/4	7/8	1/4	8 5/8	1 5/8	3/4	8 5/8	2	6	2.20
729J	971X	5/8			1/4	9 1/4	1 7/8	3/4	9 1/4	3	2	2.60
729K	973H			1	1.25	9 1/4	1 7/8	3/4	9 1/4	3	2	3.00
729L	974X	5/8			1.25	9 1/4	1 7/8	3/4	9 1/4	3	2	3.40
730J	974H		7/8	1 1/8	1.25	10	2 1/4	7/8	10	4	6	3.40
730K	976H	3/4	1	1 1/4	1.25	10	2 1/4	7/8	10	4	6	4.24
731J	977N		1 1/8		1.25	10 3/4	2 1/2	1	10 3/4	6	3	4.80
731K	977X	7/8			1.25	10 3/4	2 1/2	1	10 3/4	6	3	4.80
732J	977P		1 1/4		1.25	11 3/8	2 3/4	1 1/4	11 3/8	7	4	4.80
732K	978P	1	1 3/8		1.25	11 3/8	2 3/4	1 1/4	11 3/8	7	4	5.70

OFFSET HANDLE SOCKET WRENCHES

BILLINGS & SPENCER

"Duro" Black Rust-Proof Finish.

Drop Forged from Specially Selected
Open Hearth Steel, Heat Treated After
Machining.



Hexagon Openings.



Square Openings.

With Hexagon Openings.

Wrench Nos.	Trade Nos.	For U. S. Std. Nut, Size Bolt	For Cap Screw, Diam. of Screw	S. A. E. Standard Screw and Nut	Short Diam. of Broached Opening, Inches	From Face of Wrench to Handle, Inches	Diam. of Head, Inches	Length of Handle, Inches	Diameter of Handle, Inches	Weight Each		Each
										Lbs.	Ounces	
821A	261A	1/8	.....	.....	1/8	3/4	1/2	3 1/4	1/4	.....	1	\$0.60
822A	262D	.....	1/8	.....	1/8	3/4	5/8	4	3/8	.....	3	.66
822B	263A	1/16	.....	.....	1/16	3/4	5/8	4	3/8	.....	3	.72
822C	263D	.....	1/4	1/4	1/8	3/4	5/8	4	3/8	.....	3	.72
823A	264A	1/4	1/8	1/8	1/8	1 1/4	3/4	4 3/4	3/8	.....	4	.78
824A	265D	.....	3/8	3/8	1/8	1 1/8	3/4	5 1/2	1/2	.....	5	.88
824B	265A	1/8	.....	.....	1/8	1 1/8	3/8	5 1/2	1/2	.....	5	.88
825A	266D	.....	1/2	1/2	1/8	1 1/2	1	6 1/4	1/2	.....	9	.96
825B	267A	3/8	.....	.....	1/8	1 3/4	1 1/8	7	1/2	.....	10	1.08
825C	267D	.....	1/2	1/2	1/8	1 3/4	1 1/8	7	1/2	.....	10	1.08
826A	268A	1/2	.....	.....	1/8	2	1 1/4	7 3/4	5/8	1	.....	1.20
826B	268D	.....	3/8	.....	1/8	2	1 1/4	7 3/4	5/8	1	.....	1.20
826C	269A	1/2	3/8	3/8	1/8	2	1 1/4	7 3/4	5/8	1	.....	1.38
827A	.....	.....	.....	.....	1/8	2 3/8	1 1/2	8 1/2	1/2	1	6	1.56
827A	270A	1/2	.....	.....	1/8	2 3/8	1 1/2	8 1/2	1/2	1	6	1.56
827B	270D	.....	3/4	1 1/2	1 1/8	2 3/8	1 1/2	8 1/2	1/2	1	6	1.56
828A	271A	3/8	.....	3/4	1 1/8	2 1/2	1 5/8	9 1/4	3/4	1	15	1.80
828B	271D	.....	3/8	.....	1 1/8	2 1/2	1 5/8	9 1/4	3/4	1	15	1.80
829A	273A	3/4	1	1 1/2	1 3/8	2 1/2	1 7/8	10	3/4	2	11	2.40
830A	274D	.....	1 1/8	.....	1 1/2	3 3/8	2 1/8	10 3/4	1	3	5	2.70
830B	275A	3/8	.....	.....	1 1/2	3 3/8	2 1/8	10 3/4	1	3	5	3.00
830C	275D	.....	1 1/4	1	1 1/2	3 3/8	2 1/8	10 3/4	1	3	5	3.00
831A	276A	1	.....	1 1/2	1 1/2	3 3/8	2 1/2	11 1/2	1 1/8	5	5	3.44

With Square Openings.

Wrench Nos.	Trade Nos.	For U. S. Standard Sq. Nut, Size Bolt	For Cap Screw, Diam. of Screw	For Set Screw, Size Screw	Short Diam. of Broached Opening, Inches	From Face of Wrench to Handle, Inches	Diam. of Head, Inches	Length of Handle, Inches	Diameter of Handle, Inches	Weight Each		Each
										Lbs.	Ounces	
820J	260H	.....	.....	1/8	1/8	3/4	1 1/2	2 3/4	3/8	.....	1	\$0.54
821J	261H	.....	.....	1/8	1/8	3/4	1 1/2	3 1/4	1/4	.....	1	.60
821K	261J	.....	.....	1/4	1/4	3/4	1 1/2	3 1/4	1/4	.....	1	.60
822J	262H	.....	.....	1/8	1/8	3/4	1 1/2	4	3/8	.....	3	.66
823J	263H	.....	1/4	3/8	1/8	1 1/4	3/4	4 3/4	3/8	.....	4	.72
824J	265H	.....	3/8	1/2	1/8	1 1/8	3/4	5 1/2	1/2	.....	5	.88
825J	266H	1/4	3/8	1/2	1/8	1 1/2	1	6 1/4	1/2	.....	9	.96
825K	267H	.....	1/2	1/2	1/8	1 3/4	1 1/8	7	1/2	.....	10	1.08
826J	267X	1/8	.....	.....	1/8	2	1 1/4	7 3/4	5/8	1	.....	1.08
826K	268H	.....	1/2	5/8	1/8	2	1 1/4	7 3/4	5/8	1	.....	1.20
826L	268P	3/8	1/2	.....	1/8	2	1 1/4	7 3/4	5/8	1	.....	1.20
827J	269H	.....	3/8	3/4	1/8	2 3/8	1 1/2	8 1/2	1/2	1	6	1.38
827K	270X	1/2	.....	.....	1/8	2 3/8	1 1/2	8 1/2	1/2	1	6	1.56
828J	271H	1/2	3/4	1 1/2	1/8	2 1/2	1 5/8	9 1/4	3/4	1	15	1.80
829J	271X	1/2	.....	.....	1/8	2 1/2	1 7/8	10	3/4	2	11	1.80
829K	273H	.....	.....	1	1 1/8	2 1/2	1 7/8	10	3/4	2	11	2.40
829L	274X	3/8	.....	.....	1 1/8	2 1/2	1 7/8	10	3/4	2	11	2.70
830J	274H	.....	3/8	1 1/8	1 1/2	3 3/8	2 1/8	10 3/4	1	3	5	2.70
830K	276H	3/4	1	1 1/4	1 1/2	3 3/8	2 1/8	10 3/4	1	3	5	3.44
831J	277N	.....	1 1/8	.....	1 1/2	3 3/8	2 1/2	11 1/2	1 1/8	5	5	3.90
831K	277X	3/8	.....	.....	1 1/2	3 3/8	2 1/2	11 1/2	1 1/8	5	5	3.90
832J	277P	.....	1 1/4	.....	1 1/2	3 3/8	2 3/4	12 1/4	1 1/2	6	.....	3.90
832K	278P	1	1 3/8	.....	1 1/2	3 3/8	2 3/4	12 1/4	1 1/2	6	.....	4.80

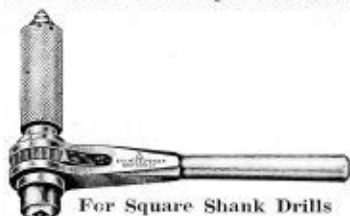
RATCHETS

BILLINGS & SPENCER PACKER

The single-acting ratchet drill is so constructed that when the pressure is exerted on the handle the pawl is supported by the heavy drop forged frame of the ratchet. This prevents slippage and breakage, and relieves the strain on the drop forged pawl.

Because the ratchet drill is an emergency tool, the Billings Genuine Packer Ratchet Drills are built extra heavy and with wider bearings throughout. In an emergency one must have a tool which is dependable and durable, and equipment buyers realize that the slight additional cost of the Genuine Billings Ratchet Drills over the more cheaply constructed substitutes is very economical insurance. All the working parts in the Billings Ratchet Drills are hardened and tempered.

SINGLE ACTING SQUARE SOCKET



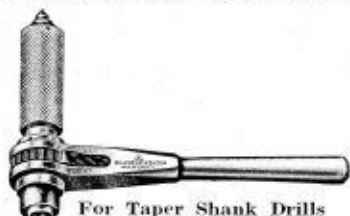
For Square Shank Drills

Drop Forged Steel, Dull Black Finish, Working Parts Hardened.

Nos.	AE1	AE2	AE3	AE4	AE5
Length Handle, In.	10 1/2	13	16	18	20
Size Square Socket.	1	1	1	2	2
Length Head, In.	7 1/4	8	9 1/4	9 3/4	10 3/4
Feed, In.	2 1/4	2 1/2	3	3 1/2	4
Weight Each, Lbs.	4 1/2	6 1/2	9 3/4	11 1/2	15 3/4
Each	\$10.50	13.50	16.00	19.00	23.00

One in a Box.

SINGLE ACTING TAPER SOCKET



For Taper Shank Drills

Drop Forged Steel, Dull Black Finish, Working Parts Hardened.

Nos.	AG1	AG2	AG3	AG4
Length Handle, In.	10 1/2	13	16	18
Size Taper Socket.	1	2	3	4
For Morse T. S. Drills,				
Inches	1 1/8 to 1 3/8	1 3/8 to 1 1/2	1 1/2 to 1 3/4	1 3/4 to 2
Length of Head, In.	6 3/4	7 3/4	9 1/4	10 1/4
Feed, In.	1 3/4	2	2 3/4	2 3/4
Weight Each, Lbs.	5	6 1/2	9 1/2	11
Each	\$13.00	16.00	20.00	25.00

One in a Box.



For Square Shank Drills

Drop Forged Steel, Dull Black Finish, Working Parts Hardened.

Nos.	AF1	AF2
Length Handle, Inches.	10 1/2	13
Size Square Socket.	1	1
Length of Head, Inches.	4 1/4	5
Feed, Inches	1 1/4	1 3/4
Weight Each, Lbs.	3 3/4	5 1/4
Each	\$9.00	10.50

One in a Box.

MACHINISTS C CLAMPS

BILLINGS & SPENCER

Model AY

Drop Forged Steel, Heat Treated.
Tool Steel Screw Hardened and Tem-
pered, "Duro" Black Rust-proof Fin-
ish.

Nos.	1	2	3
Opens, Inches.	1 1/4	2 1/4	3 1/4
Depth, Inches.	1	1 1/2	2 1/2
Wt. Each, Lbs.	7/16	2	5 1/4
Each	\$1.50	3.50	5.00
Nos.	4	5	
Opens, Inches.	4 1/2	6 1/2	
Depth, Inches.	2 1/2	3 3/8	
Wt. Each, Lbs.	7 1/2	11 1/2	
Each	\$6.50	8.00	



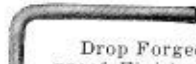
LATHE DOGS

DROP FORGED STEEL

Model CK Safety Screw

Drop Forged Steel, "Duro" Black Rust-
proof Finish.

Nos.	1B	2B	3B
Size, Inches.	3/8	1/2	3/4
Weight Each, Oz.	3 1/2	5	9
Each	\$1.00	1.10	1.20
Wrench, Extra, Ea. ....	.12	.14	.16
Nos.	4B	5B	6B
Size, Inches.	1	1 1/4	1 1/2
Weight Each, Oz.	14 1/2	26	32
Each	\$1.40	1.70	2.00
Wrench, Extra, Ea. ....	.16	.20	.24



MALLEABLE IRON

Bent Tail

With U. S. Standard Steel Set Screw,
Points Hardened.

These Dogs are recommended for heavy
work and have a number of uses when a
Drop Forged Clamp is not necessary.

Nos.	1	2	3		
Size, Inches.	3/8	1/2	5/8		
Weight Each, Lbs.	1/4	3/8	5/8		
Each	\$0.40	.50	.60		
Nos.	4	5	6		
Size, Inches.	3/4	7/8	1		
Weight Each, Lbs.	3/8	1	1 1/4		
Each	\$0.60	.70	.70		
Nos.	7	8	9	10	11
Size, Inches.	1 1/8	1 1/4	1 3/8	1 1/2	1 3/4
Weight Each, Lbs.	1 1/2	1 5/8	1 3/4	2	2 3/4
Each	\$0.80	.80	.95	.95	1.10
Nos.	12	13	14	15	
Size, Inches.	2	2 1/4	2 1/2	3	
Weight Each, Lbs.	3 1/2	4 1/4	5 1/4	6 1/2	
Each	\$1.20	1.35	1.45	1.60	
Nos.	16	17	18	19	
Size, Inches.	3 1/2	4	4 1/2	5	
Weight Each, Lbs.	10	12	15	18	
Each	\$1.80	2.10	2.75	3.25	

